

REMARKS

With the addition of new claim 7, claims 1-7 are pending in the present application. Claims 4-7 are currently under consideration, claims 1-4 having been withdrawn by election in response to a restriction requirement.

Claims 4 and 5 have been amended above and claim 7 has been added to better clarify the claimed invention. No new matter has been added.

Claims 4-6 stand rejected under 35 USC 112, second paragraph, as being indefinite. The Examiner contends that claim 4 indicates that the secondary electrodes are grounded which appears to be contradictory with their serving as output terminals. Although the secondary electrodes may be grounded, the output terminals are not composed solely of the second electrode but instead also include one of the primary electrodes. The primary electrode can be thought to serve as the “hot” terminal and the secondary electrode(s) to serve as the ground (GND) or neutral terminal. An input potential is applied across the input terminals whereas an output potential is developed across the output terminals. For the foregoing reasons, it is respectfully asserted that this rejection is improper and should be withdrawn.

The Examiner also states that there is no antecedent basis for the term “said” in “said measuring” recited in claim 5. Claim 5 has been amended accordingly, thereby overcoming the 35 USC 112 rejection.

Claim 4 has been rejected under 35 USC 102(b) as lacking novelty over admitted prior art. For the reasons set forth below, Applicant respectfully disagrees.

The Examiner states that Fig. 4 of the present Application discloses a second electrode surrounding the primary electrode and also that the specification states “the second electrodes formed on the primary surfaces of the crystal substrate can be short-circuited and grounded.” The Examiner also contends that “one of said pair of primary electrodes (33a, 33b) and said secondary electrodes (36a, 36b) serve as input terminals and another of said pair of primary electrodes and said secondary electrodes serve as output terminals.” There is no basis for such a contention, however, in the prior art.

An object of the present invention was to overcome the problems of measurement precision for resonance frequencies of high-frequency oscillators when using conventional pi-circuit measurement methods. The present invention contemplates multiple, high-frequency oscillators of the smallest unit formed on a large wafer. A second electrode is grounded. Probes are put into contact with an input terminal, formed from one of the main electrodes and the second electrode, and an output terminal, formed from the other main electrode and the second electrode. Measurement is performed using the S parameter method. As a result, high-precision resonance frequency characteristics can be obtained.

While the second electrode surrounds the main electrode in Fig. 4 and the specification states that the second electrodes formed on the main surfaces of the crystal substrate can be short-circuited and grounded, there is no disclosure that “an input terminal is formed from one of the main electrodes and the second electrode and an output terminal is formed from the other main electrode and the second electrode.” Also, the development of the “input terminal and the output terminal” of the present invention addresses the problems of measurement precision described above. There is not even a suggestion that this type of problem was considered or taken into account in the structure shown in Fig. 4.

As a result, it is clear that the structure of the invention in claim 4 differs from that of Fig. 4.

Furthermore, new claim 7, which corresponds to the second embodiment shown in Fig. 2, is also patentable. As described above, there is no description or suggestion of “the input terminal and the output terminal” in the crystal oscillator structure shown in the background technology in Fig. 4.

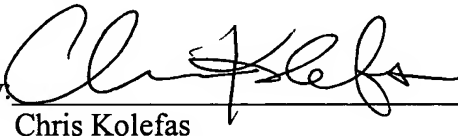
As described above, the claimed invention and the background technology have completely different structures, and these different structures result in completely different operations and advantages. Thus, the claimed invention is not identical to the background technology and clearly is not something that could be easily derived from the background technology.

Applicant thanks the Examiner for the indication of allowable subject matter in claims 5 and 6. With the amendment above of claim 5, claims 5 and 6 are now both allowable.

In view of the above amendments and remarks, Applicant respectfully submits that the present application is in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass the present application to issue.

Respectfully submitted,

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